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NATIONAL PHOTOGRAPHIC
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PHOTOGRAPHIC
INTERPRETATION
REPORT

VOR STATION, KUN-MING
CHINA

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OCTOBER 1975
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PIR-040/75

Warning Notice
Sensitive Intelligence Sources and Methods Involved

NATIONAL SECURITY INFORMATION
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VOR STATION, KUN-MING, CHINA

1. A very high frequency omnirange (VOR) station has been identified near Kun-ming/Wu-chia-pa Airfield in Kun-ming, China, 25X1 25X1. This is the first identification of a VOR station in China.

2. The VOR station consists of a hemispherical dome 20 feet in diameter and a circular metal lattice counterpoise. The dome and counterpoise are mounted 25X1 concrete or masonry tower which is wall secured. Small buildings are at each corner of the secured compound (Figure 2). The Chinese VOR is generally similar in configuration to free world VOR systems (Figure 3).

3. Although the site of the VOR had been prepared by 25X1 construction of the station did not begin, when a foundation for the 25X1 tower and survey lines were observed at the large graded area. The VOR station is part of Kun-ming/Wu-chia-pa Possible Electronics Facility 2,000 feet to the southeast. 25X1 This facility consists of approximately 20 buildings and may have been a communications facility associated with Kun-ming/Wu-chia-pa Airfield., it contained five 25X1 horizontal dipole antennas which were later removed.[1]

4. A probable underground cable connects the VOR with two buildings in the electronics facility. The Kun-ming/Wu-chia-pa Possible Electronics Facility is also served by an underground cable system connecting four other installations in the Kun-ming area. One of these installations is Kun-ming/Wu-chia-pa Airfield, where the cable serves a possible instrument landing system that is under construction. The other cable served installations Kun-ming/Wu-chia-pa Air Defense Sector Headquarters, Kun-ming Military Headquarters Area, and 25X1 Kun-ming Artillery Division Headquarters and Army Barracks AL 9, are discussed 25X1 in an NPIC basic report.[2]

IMAGERY ANALYST'S COMMENTS

5. Despite similarities, a comparison between the new VOR and other VOR systems indicates several anomalies at the new station. The support provided by Kun-ming/Wu-chia-pa Possible

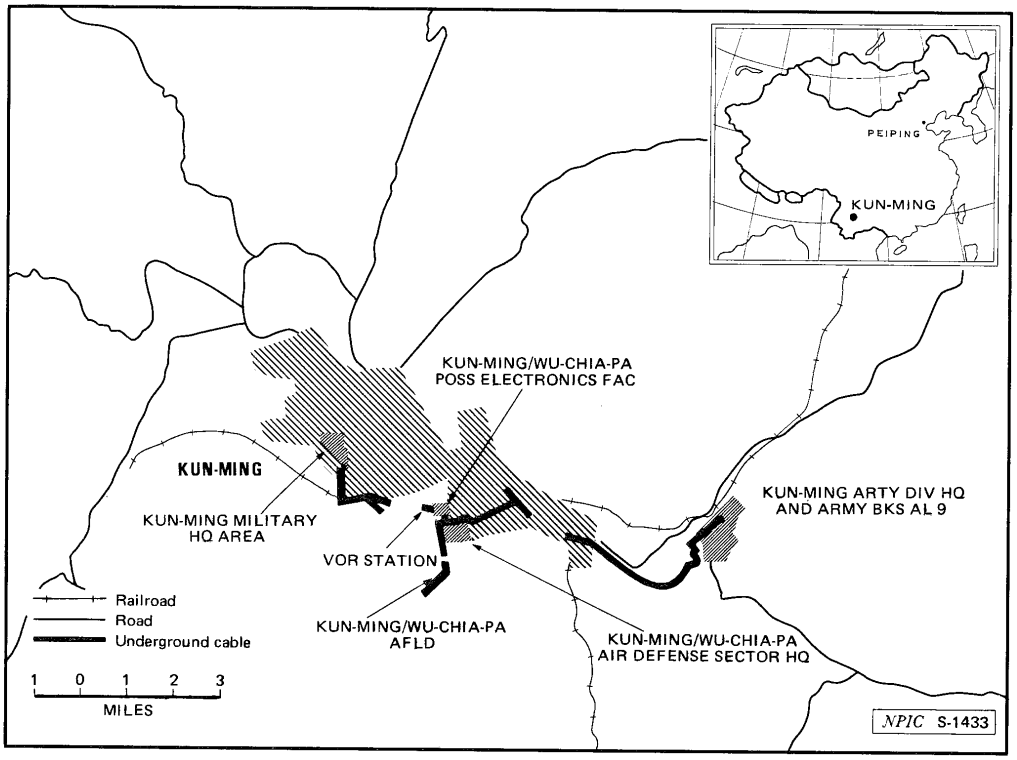

FIGURE 1. LOCATION OF VOR STATION AND POSSIBLE RELATED INSTALLATIONS

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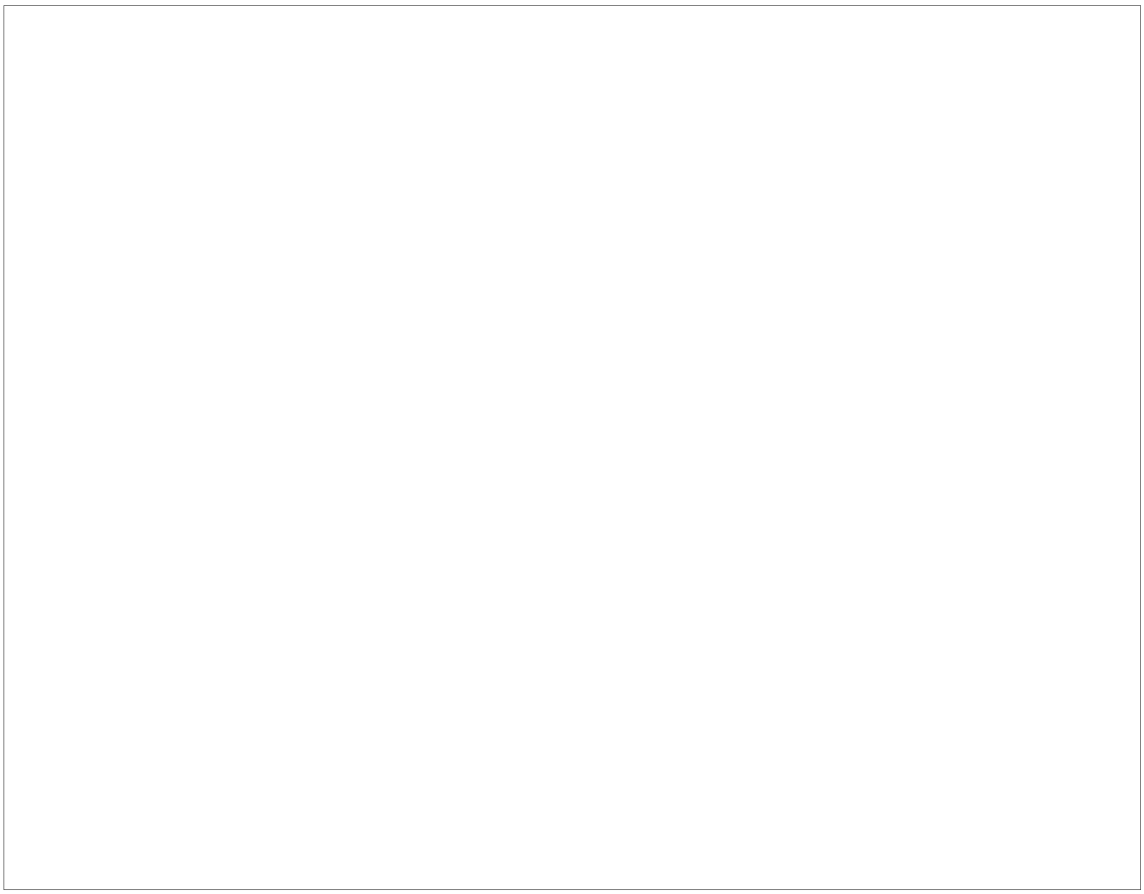

Electronics Facility and the four buildings at the base of the VOR is more than necessary for a typical VOR station, which requires only a small instrumentation building. In addition, because a VOR does not usually require support and is passive as far as ground stations are concerned, it probably would not be necessary to cable connect the Chinese VOR with other military installations. The external configuration of the Chinese VOR also differs somewhat from that of other stations. Most VOR antennas and counterpoises are mounted on an instrumentation building (Figure 3) or on the ground, but the Chinese system is mounted on a large tower. The dome-shaped antenna housing is also slightly larger than those required by most VOR systems that use conical antenna housings.

REFERENCES

DOCUMENTS

1. NPIC. PIR-073/74, *Kun-ming HF Communications Facilities, China,* Dec 74 (TOP SECRET RUFF/ 25X1 25X1
2. NPIC. RCA-03/0023/75, *Underground Cable, Kun-ming Military Region,* Aug 75 (TOP SECRET RUFF 25X1 25X1

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